EFFECT OF BOARD INDEPENDENCE AND RISK MANAGEMENT ON FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

Olawale Nurudeen Sanni[1], Adamu Shalli[2] & Patience Kanwai[3]

[1,2,3] Department of Accounting, ABU Business School, Ahmadu Bello University, Nigeria

ABSTRACT

This study examined the effect of board independence and risk management on financial performance of listed deposit money banks in Nigeria for the period of 2009-2018. The study used correlational research design. Data were collected from the published annual financial reports of studies listed deposit money banks in Nigeria. The population of the study comprised of the 14 listed deposit money banks. The adjusted population of twelve (12) listed deposit money banks in Nigeria was arrived at using three points filter. Extreme value theory, credit risk theory and agency theory were used to underpin the study. The data were analyzed with the aid of random effect multiple regression technique, the result of the random effect regression showed that board independent has a positive and significant effect on the financial performance of listed deposit money banks in Nigeria. However, negative significant relationship was found between market risk, credit risk and financial performance of listed deposit money banks in Nigeria. Based on the findings, the study recommended that banks should possess considerable proportion of independence non-executive directors that will contribute actively to the strategic decision-making process, and securing access to critical resources which in turn will improve performance. In addition, the study suggests that bank should hire qualified personnel to analyze credit risk. They can gather information of clients in the entire bank, of changes in financial environment, of consumption trends and of consumer loans. The personnel can periodically analyze and adjust the weight of every risk factor and control the rate of overdue payment loan in the right moment. Finally, the study recommends that banks should mitigate the market risk by using appropriate risk management strategies through forwards, futures, swaps, and insurance as well as securitization techniques.

Keywords: *board independence, risk management and financial performance*

KESAN AHLI LEMBAGA BEBAS DAN PENGURUSAN RISIKO TERHADAP PRESTASI KEWANGAN BANK SIMPANAN YANG DISENARAIKAN DI NIGERIA

ABSTRAK

Kajian ini adalah untuk mengkaji kesan ahli lembaga bebas dan pengurusan risiko terhadap prestasi kewangan bagi bank simpanan yang disenaraikan di Nigeria dalam tempoh 2009-2018. Kajian ini menggunakan reka bentuk penyelidikan korelasi. Data dikumpulkan dari laporan kewangan tahunan yang diterbitkan dari kajian bank simpanan yang disenaraikan di Nigeria. Populasi bagi kajian ini terdiri daripada 14 buah bank simpanan yang tersenarai. Populasi sebanyak dua belas (12) bank simpanan yang disenaraikan di Nigeria diselaraskan menggunakan penapis tiga mata. Teori nilai ekstrim, teori risiko kredit dan teori agensi digunakan untuk menyokong kajian ini. Data dianalisis dengan bantuan teknik regresi berganda rawak, hasil regresi kesan rawak menunjukkan bahawa ahli lembaga bebas mempunyai kesan positif dan signifikan terhadap prestasi kewangan bank simpanan yang disenaraikan di Nigeria. Walaubagaimanapun terdapat hubungan yang signifikan negatif antara risiko pasaran, risiko kredit dengan prestasi kewangan bank simpanan yang disenaraikan di Nigeria. Berdasarkan penemuan ini, kajian menyarankan bank-bank supaya mempunyai sebahagian besar pengarah bukan eksekutif bebas yang akan menyumbang secara aktif kepada proses membuat keputusan strategik dan memperoleh akses kepada sumber-sumber kritikal yang seterusnya akan meningkatkan prestasi. Di samping itu, kajian menunjukkan bahawa bank perlu mengupah kakitangan yang berkelayakan untuk menganalisis risiko kredit. Mereka boleh mengumpulkan maklumat pelanggan di seluruh bank, perubahan dalam persekitaran kewangan, trend penggunaan dan pinjaman pengguna. Kakitangan boleh menganalisis secara berkala dan menyesuaikan pemberat setiap faktor risiko dan mengawal kadar pinjaman pembayaran tertunggak pada saat yang tepat. Akhir sekali, kajian ini menyarankan agar bank-bank harus mengurangkan risiko pasaran dengan menggunakan strategi pengurusan risiko yang sesuai melalui *forwards, futures, swaps* dan insuran serta teknik pensekuritian.

Kata Kunci : *ahli lembaga bebas, pengurusan risiko dan prestasi kewangan*

INTRODUCTION

Bank as financial intermediaries play a very significant role in the economic resource distribution of any nation. To perform this role an effective banking system is needed and without it, it is difficult for the economy to mobilize the real resources necessary for economic growth and stability. For economic development two basic issues of financing are important; first, how best external funds are provided to the business sectors and second, how efficiently financiers are monitoring the behavior and performance of these corporate borrowers under an effective system of corporate governance (Noor and Das 2018).

Financial performance of a bank remains one of the major routes of assessing its wellbeing and to know whether it will be able to meet financial obligation. The occurrence of increased non- performing loans in a loan portfolio deters banks from achieving their goals. Non- performing loans are the percentage of loan amounts that are not serviced for three months and above (Serwadda 2018). The importance of credit risk management in banks is due to its ability in affecting the banks' financial performance. Kolapo, Ayeni and Oke, (2012), opined that adverse changes in the credit quality of borrowers or general deterioration in economic conditions could affect the recoverability of facilities from customers and this will affect the profitability of banks. This accords the statement made by the Governor of Central Bank of Nigeria, Godwin Emefiele inCiti Media Summit, (2015), that borrowers were not able to service the loan from the Nigerian banks.

On the other hand, Market risks can lead to significant losses very quickly in volatile market conditions and also complete institutional collapse in severe situations. Market risk refers to the risk to an institution resulting from movements in market prices, in particular, changes in interest rates, and equity and commodity prices (Muriithi, Muturi, and Waweru 2016). The problem of identifying causality running from governance and risk management structures to risk taking and, ultimately, bank performance needs to be recognized from the outset. Risk management function is responsible for measuring and monitoring risk exposures and it is determined by the bank's overall governance structures (Ellul 2015).

Corporate governance is structured to alleviate agency issues. Corporate governance serves as one of the main element in improving economic efficiency, growth and enhanced investors" confidence. With regard to board monitoring, independence directors may mitigate agency costs by aligning the interests of powerful actors with the interests of the firm (Jensen & Meckling, 1976). First, independence directors can improve the ability of the board to monitor firm performance or to assess top management's or controlling shareholders' behavior by determining if they are diverting corporate resources through self-dealing transactions or by deciding a fair compensation for board members.

As a consequence of corporate governance failure, many companies around the world, even those flaunted as too big to fail, have experienced crises and scandals that led to their end. According to Umaru Ibrahim, managing director of the NDIC (June 13, 2018) stated that weak corporate governance and internal controls were tipping the financial sector towards crisis conflated with a similar alarm raised by the International Monetary Fund anchored on weak regulation and adverse operating conditions on financial performance of banks. In addition, the recent failure of one of the nation's deposit money banks, Skye Bank Plc in 2018 was as a result of corporate governance culture of our financial institutions (Thisday 2018).

In addition, the trending economic recovery news in the third quarter of 2017 (Q3'17), did not prevent the banking sector from some misery in the form of rising bad loans as 14 banks quoted on the Nigerian Stock Exchange (NSE) recorded 8.0 percent increase in bad loans (impairment losses), within the period. Consequently, the 14 banks controlling over 90 percent of the Nigerian financial market, recorded N368.3 billion impairment losses for the Q3'17, representing an increase of 8.0 percent from N341.1 billion in corresponding third quarter,Q3'16.(Vanguard, 2017). Banks are greatly opened to vast number of systematic and unsystematic risks during their business operations (Wisdom, Isiaka, and Akindele 2018).

Several studies have been conducted on risk management and financial performance both in developed and developing countries using risk management as the independent variable. For instance, Ishtiaq (2015) ,Nimalathasan and Pratheepkanth (2012) , Elamer (2018), Hallunovi and Berdo (2018), Wanjohi, Wanjohi, and Ndambiri, (2018), Okere and Isiaka, (2018), Rop (2018), Alawattegama (2018), Ayodele and Oladele (2014), Isiaka, Olumide, and Irom (2018) Oehmen, Olechowski, Kenley, and Ben-daya (2014). While, Ene and Alem (2016) and Maman (2016) Unuagbon and Oziegbe (2016) and Abdallah (2019), carried out studies on board independence and financial performance. However, the results of their studies were inconsistent and sometimes conflicting empirical evidence. While some of the studies documented significant negative relationship, others suggested significant positive relationship or no relationship between board independence or risk management and financial performance. One of the reasons for the mixed empirical evidence could be the difference in economic and legal conditions of countries.

From survey of current relevant literature, it has been found that there are scanty or no studies on the link of using board independence, risk management and financial performance of listed deposit money banks in Nigeria. It is in recognition of this that it is deemed imperative to specifically examine the effects of corporate of governance (proxied by, board independence and managerial ownership) and risk management (proxied by, credit risk and market risk) on financial performance of listed deposit money banks in Nigeria from the period of 2009 to 2018.

The remainder of the paper is organized as follows: section 2 presents relevant extant studies. Section 3 discusses the methodology employed for the study. In section 4, the results of data analysis are presented and discussed. Section 5 concludes the study by highlighting the finding and its policy implications.

LITERATURE REVIEW

This section reviews relevant studies on corporate governance, risk management and financial performance.

Financial Performance

The concept of financial performance is a controversial issue largely due to its multi-dimensional meanings. Performance is the result of activities of an organisation or investment over a given period. According to Iswatia and Anshoria (2007), performance is the function of the ability of an organisation to gain and manage its resources in several ways to develop competitive advantage. According to Shehu (2017), as a performance measure, ROA is generally considered as good internal management ratio because it measures profit against all the assets an organization uses to make those earnings. San and Heng (2011), contend that productivity, profitability, growth or even customer satisfaction are used in measuring firm performance as these tools are closely related. Hence, this study adopted the concept of Shehu *et al.,* (2017) on financial performance as a working definition as ROA provides good information about a firm's financial performance in terms of using assets to create income. It shows the percentage of profit that a corporation earns in relations to its overall resources. Thus, it is considered as a measure of efficiency too.

Board Independence

According to Faatihah, Fuzi, Abdul, and Julizaerma (2016), Independence directors are directors that are not full-time employees as compared to the executive directors who are full-time employees and are involved in the day-to-day operation of the company. The role of independence non-executive directors was as a monitoring mechanism for the performance and activities of executive directors and management. In general, the representation of independence directors was vital for the board's effectiveness.

Credit Risk

Credit risk is measured as nonperforming loan to total loan as used. It arises when that a borrower defaults and does not honor its obligation to service debt(Ambrose 2017). It occurs when borrower is unable to pay his debts as agreed or fails to make timely payment on his debt servicing (Iwedi and Onuegbu 2014). Obalemo, (2007), defined credit risk as a risk based on the assumption that a borrower would default in repayment to the lender. This study therefore adopted concept of Ambrose (2017), as a working definition because non-performing loans to total loans have been widely used as a measure of credit risk and are often associated with failures and financial crises in both the developed and developing countries. It when payments of interest and principal are past due by 90 days or more, or at least 90 days of interest payments have been capitalized, refinanced or delayed by agreement, or payments are less than 90 days overdue.

Market Risk

Market risk refers to the risk to an institution resulting from movements in market prices, in particular, changes in interest rates and equity and commodity prices (Muriithi, 2016). Form of market risk also arises where banks accept financial instruments exposed to market price volatility as collateral for loans (Stimson, 1985). Hence, the study adopted the concept of Muriithi (2016), as a working definition as interest rates have had large effects on banks' net interest income . Moreover, this implicitly takes account of the way that banks have chosen to adjust the pricing of their assets and liabilities, as well as the actual behaviour of bank customers with regard to prepayments and early withdrawals.

Board Independent and Financial Performance

Adekunle and Aghedo (2014), examines the relationship between corporate governance and financial performance of randomly selected quoted firms in Nigeria. It investigates corporate governance variables and analyses whether they impact on firm performance as measured by return on asset (ROA) and profit margin (PM). Corporate governance was proxied by composition of board member, board size, CEO status and ownership concentration which served as the independent variables. The ordinary least square regression was used to estimate the relationship between corporate governance and firm performance. Findings from the study show that there is positive and significant relationship between composition of board member and board size as independent variables and firm performance.

Abdallah Mohammad and Qadorah (2019), examined effect of corporate governance mechanisms on firm performance in Jordan as one of emerging economies. The current study used the multiple regression method to analyze available data for a sample of 64 industrial firms listed in the Amman Stock Exchange (ASE) for the fiscal year 2013. The study revealed that the board of director's independence has a positive impact on performance. On the other hand, the findings surprisingly showed no evidence to support the impact of board meeting frequency on performance. The practical implications of the current study demonstrated that good corporate governance is imperative to all organizations and must be encouraged for the interest of all stakeholders. Moreover, these periods can be regarded as not too current as a lot of activities have taken place especially in Nigeria between 2016 and 2017, which include the implementation of Treasury Single Account (TSA) by the Federal Government that significantly affected the operation of some Banks and other financial institutions who are heavily relied on Federal Government Agencies as customers.

Credit Risk and Financial Performance

Isiaka et al. (2017), examined the effect of corporate board size, risk management on financial performance of listed deposit money banks in Nigeria for the period of 2011-2016. Sample of fourteen (14) listed deposit money banks in Nigeria were used for the study due to the accessibility and availability of data. Corporate board size and risk management as the independent variable was proxy with numbers of board of directors, liquidity risk, credit risk and operating risk, while the return on equity(ROE) and earnings per share (EPS) were used to proxy financial performance. Data were collected from secondary source through the annual report and account of the banks for the period under study and the data was analysed using multiple panel regression techniques. The findings reveal that board size, credit risk and operating risk are significant negative effect on return on equity (ROE) and earnings per share (EPS) respectively. Nonetheless, the study fall short of theories to support the knowledge base of the phenomenon to be investigated which makes it difficult in ascertaining the academic position and the underlying factors to the researcher's assertions and/or hypotheses. On that note, this study tend to fill this gap using appropriate theories.

Annor and Obeng (2018), examined the impact of credit risk management on the profitability of 6 selected commercial banks listed on the Ghana stock exchange. Secondary data was gathered from the annual reports of the six selected banks and Ghana banking survey for the years under consideration. The study adopted the Random Effect Model within the panel estimation technique framework. The study used return on equity (ROE) to measure profitability of bank, non-performing loans, loan loss provisions ratio, loan to asset ratio and capital adequacy ratio as credit risk. The findings showed that indeed credit risk management has negative significant relationship with the profitability of banks.

Market Risk and Financial Performance

Ayodele and Oladele (2014), carried out studies on risk management in the Nigerian banking industry. First bank of Nigeria PLC was used as the case study being the oldest and the biggest bank out of the twenty- three (23) banks currently operating in Nigeria economy. The data used for the study were collected majorly from primary source through the distribution of questionnaires to respondents in the bank. Simple percentages were used to analyze the respondents' responses to each of the question while Chi- square and the Analysis of Variance statistic (ANOVA) were used to test the stated hypothesis. The analysis revealed that risk in the likelihood of fraud and forgery, operational risk, market risk and system risk abound in the Nigeria banking operations which needed to be managed appropriately in order to improve performances and profitability of the banks. Based on the research findings, it was discovered that Nigeria banking operations are affected more by credit risk and operational risk than market risk.

Kassi, Rathnayake, Jean, and Edjoukou (2019), Carried out studies on the effect of market risk on the financial performance of 31 non-financial companies listed on the Casablanca Stock Exchange (CSE) over the period 2000-2016. We utilize three alternative variables to assess financial performance, namely return on assets, return on equity and profit margin. Next, we use the degree of financial leverage, the book-to-market ratio, and the gearing ratio as market risk variables. Besides, we employ the pooled OLS model, the fixed effects model, the random-effects model, the difference GMM and the system GMM models. The results show that market risk indicators have a negative and significant influence on the companies' financial performance.

Muriithi, Muturi, & Waweru (2016), effect of market risk on financial performance of commercial banks in Kenya. The study covered the period between year 2005 and 2014. Market risk was measured by degree of financial leverage, interest rate risk and foreign exchange exposure while financial performance was measured by return on equity. The study used the balance sheets components and financial ratios for 43 registered commercial banks in Kenya. Panel data techniques of random effects, fixed effects estimation and generalized method of moments (GMM) were used to purge time–invariant unobserved firm specific effects and to mitigate potential endogeneity problems. From the results financial leverage and market risk indicators have negative and significant relationship with bank profitability.

THEORETICAL FRAMEWORK

This section explains the related theories on which the study is based. there are a number of theoretical perspectives which are used in explaining the corporate governance, risk management and financial performance. Extreme value theory, credit risk theory, integrated theory and agency theory were used to underpin the study.

Extreme Value Theory

Extreme value theory was pioneered by Leonard Tippett in 1985, he stated that market risk is the risk of losses in positions arising from movements in market prices. Muriithi (2016), opined that market risk is a dominant source of income fluctuations in financial institutions all over the world. The financial institutions with significant amounts of trading activity proved to be very vulnerable to extreme market movements and, in time, the measurement of market risk became a primary concern for regulators and also for internal risk control. Market risk which comprises of interest rate risks affect the financial performance of banks. Usually, market risks are outside the control of the banks, as they are determined by factors that affect the overall economy(Aruwa and Musa 2014).

Credit Market Theory

A model of the neoclassical credit market postulates that the terms of credits clear the market. If collateral and other restrictions (covenants) remain constant, the interest rate is the only price mechanism. With an increasing demand for credit and a given customer supply, the interest rate rises, and vice versa. It is thus believed that the higher the failure risk of the borrower, the poorer the financial performance (Olalekan et al. 2018).The theory is supported in the study by Samuel (2015), on the effect of credit risk on the performance of commercial banks in Nigeria.

Agency Theory

Jensen and Meckling (1976) stated that the agency relationship is a contract between the manager and the investor. This theory studies the relationship between the principal and the agent. The divergence of the objective of managers and shareholders leads to agency cost. Effective monitoring can bring down these agency costs, thereby improving firm performance. Agency theory suggests that the above task is facilitated by a board whose composition reflects a greater proportion of outside independent directors since such composition could represent a more effective way in monitoring and controlling managerial actions (Byrd and Hickman 1992). The rationale is that independence is likely to guarantee better monitoring of the management team and contribute to improved performance. Independent directors are widely believed to be better monitors of managers as they strongly value maintaining their personal reputation in the directorship market(Fama and Jensen 1998).

METHODOLOGY

The study adopted the correlational research design. The design is informed by the research paradigm which is the positivism approach. The population of the study comprised of all the fourteen (14) listed deposit money banks in Nigeria stock exchange (NSE) and three points filter were used as criterion to arrive at the adjusted population of twelve banks (12).The technique is based on these criteria:

i. The firm must be listed on the NSE one (1) year before 2009.
ii. Firm must not be delisted during the period of study
iii. Availability of data in the annual financial reports of the firms for the period under study i.e., 2009-2018.

The financial data used for the study is secondary in nature obtained from the annual reports. Panel regression analysis was employed based on the fact that the study involves the use of both time series and cross sectional data. The independent variables considered are, board independence, credit risk, managerial ownership and market risk, while the dependent variable is financial performance.

Variables Measurement and Model Specification

Dependent Variable
The financial performance is proxied as return on asset and measured as profit after tax / total asset (Ahmed, 2014)

Independent Variable
The board independence is measured as the proportion of Independent Non-Executive Directors to the total number of board members (Hoque and Muradoglu, 2013), credit risk is measured as Non-Performing Loans/Loans& Advances (Arif Hussain, Ihsan & Hussain, 2016) and market risk is measured as Net Interest Margin (NIM) to total asset(Odeke and Odongo 2014)

Model Specification
The model is stated below:
$ROA_{it} = \beta_0 + \beta_1 BDIND_{it} + \beta_2 CRD_{it} + \beta_3 MRK_{it} + e_i$
Where: i= firm, t= year
β_0= Intercept β_1, β_2 and β_3 = the coefficients of the Variables.
e = Error Term
ROA= Return on Asset
BDIND = Board Independence
CRD = Credit Risk
MRK= Market Risk

DATA PRESENTATION AND DISCUSSION

In this section, data collected in the course of carrying out the study were presented and discussed. The hypothesis formulates for the study was tested to determine the effect of board independence and risk management of financial performance of listed deposit money banks.

Table 4.1 Descriptive Statistics

Variable	**Obs**	**Mean**	**Std.Dev.**	**Min**	**Max**
ROA	120	.013	.035	-.242	.107
BIND	120	.151	.08	0	.429
CRD	120	.08	.065	.01	.263
MRK	120	.082	.068	.01	.263

Source: summary of STATA OUTPUT

Table 4.1 provides a summary of the descriptive statistics of the dependent and independent variables for the sampled listed deposit money banks in Nigeria. This shows the average indicators of variables computed from the financial statements. The return rate measured by return on asset (ROA) reveals an average of 1.3 percent. This picture suggests a poor performance during the period under study. The ROA measures the contribution of net income per naira (local currency) invested by the firms' stockholders; a measure of the efficiency of the owners' invested capital. The maximum and minimum values of ROA ware 0.107 and -0.242 respectively. That means the most profitable deposit money banks earned N0.107 of net income from a single N1 of asset investment and the maximum losses incurred by the deposit money banks is -N0.242 on each N1 of asset investment. The standard deviation of ROA of 0.35 shows high variability across deposit money banks in Nigeria.

On the other hand, the average of Board independence (BIND) as measured by the number of independence non-executive directors to total board size is 15.1%. Maximum and minimum proportion 42.9% and 0% respectively, with a standard deviation of 8%. The 0% implies that some banks are yet to fully comply with corporate code of 2012, which stipulated that banks should have at least two independent non-executive directors. The mean value for credit risk as measured by ratio of provision for impaired loan to total loan of bank is 8% with standard deviation of 6.5% indicating moderate variability across the listed deposit money banks in Nigeria. The minimum and maximum rates are 1% and 26.3% respectively.

Table 4.2 Correlation Matrix

Variables	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
(1) ROA	1.000				
(2) BIND	0.182*	1.000			
	0.046				
(3) CRD	0.038	-0.260*	1.000		
	0.676	0.004			
(5) MRK	-0.052	-0.255*	0.482*	0.331*	1.000
	0.575	0.005	0.000	0.000	

* shows significance at the .05 level

Source: Summary of STATA OUTPUT

From the correlation matrix table 4.2, it can be seen that board independent (BIND) is positively correlated with return on (ROA) of the listed deposit money banks in Nigeria, implying that the variables move in the same direction with ROA. On the other hand, credit risk (CRK) and market risk (MRK) are negative correlation with ROA. The implication is that the above variables move in the opposite direction with the ROA. Relatively, the table indicates that there is negative correlation between CRD, MRK and BIND. However, it further shows that positive relationship exists between CRD and MRK.

Residual tests

The hausman specification test was conducted to choose between the fixed and random effect model for model one. The result of the hausman test revealed that the value of chi2 is 0.00 and the prob>chi 1.0000, the insignificant value as reported by the probability of chi2 indicates that the hausman test is in favor random effect model. Further to this, the Breusch and Pagan lagrangian multiplier test for random effect was conducted to choose between the random effect result and OLS regression. The result deduced from the test showed chi2 of 2.21 with the p-value of 0.0241. This implies that random effect regression model is the best suitable to be interpreted in this study for model one. To test for the existence of heteroskedasticity, the present study used modified Wald test for group wise heteroskedasticity. The study reveal that Chi2 of 0.42 with p-value of 0.0917, implying absence of heteroskedasticity and that the null hypothesis that the variance of the residual is constant (homoscedastic) is not rejected. The study conducted multicollinearity test to show the strength of relationship among the explanatory variables themselves, which may affect the result of the study. Variance inflation factor (VIF) was conducted and the values for all the variables are less than 10 and the tolerance values for all the variables are greater 0.10 (rule of thumb). This shows there is no multicollinearity problem.

Table 4.3: Random Effect Regression Results Model One

ROA	Coef.	St.Err.	t-value	p-value	Sig
BIND	0.090	0.037	2.44	0.015	**
CRD	-1.417	0.232	-6.11	0.000	***
MRK	-1.323	0.220	-6.01	0.000	***
Constant	-0.002	0.008	-0.29	0.770	

R-squared within	0.259	VIF	1.18
Overall r-squared	0.273	Number of obs	120.000
Chi-square	41.837	Prob > chi2	0.000
R-squared between	0.384		

**** p<0.01, ** p<0.05, * p<0.1*

Source: summary of STATA OUTPUT

From table 4.3, it can be observed that the adjusted R^2 is 0.273 which means that 27.3% of variation in ROA of listed deposit money banks in Nigeria was explained jointly by the independent variables captured in the model and p-value of 0.0000 shows that it is significant at 1%. This implies that the model is fit.

Table 4.3 shows that there is positive significant relationship between board independent (BIND) and financial performance of listed deposit money banks in Nigeria with the coefficient of 0.09 at 5% level of significant as indicated by p-value of 0.015. This implies that increase in number of independent directors will have positive influence on financial performance. This is because independent directors are likely to seek and facilitate other channels that aid their monitoring activities. They also play an important role in processing and interpreting financial disclosures made by the firm and in acquiring additional information to determine the future financial prospects of the firm. While other factors remain constant, this provides a basis for rejecting null hypothesis that says, board independent has not significant impact on financial performance of listed deposit banks. This finding is consistent with that of Adekunle *et al* (2014) and Abdallah (2019) but not in line with Ararat *et al* (2010) who found a significant negative relationship between board independence and timeliness of financial performance.

The relationship between credit risk (CRD) and financial performance of listed deposit money banks in Nigeria is found negative with the coefficient of -1.417 at 1% level of significant as indicated with the p-value of 0.000. Thus, increase in credit risk will have adverse effect on financial performance of listed deposit money banks in Nigeria. This is because increase in the amount of loan and advances above an ideal limit may have more deteriorating effect on financial performance due to the likely hood of debtors failing to honor their obligation to the banks and more proportion of total loans and advances that turn out to be non-performing dwindles and reduces banks financial performance. This provides a basis for rejecting null hypothesis that says, credit risk has no significant impact on financial performance of listed deposit money banks in Nigeria. This finding is in line with the proposition of financial distress theory and the findings of Isiaka *et al*. (2017) and Annor *et al* (2018) who found that credit risk is one of the component that financial distress emanates from, the shareholders wealth may be affected by increase of at a decreasing rate.

The coefficient of market risk (MKR) is 0.22, which shows that, there is negative relationship between market risk and financial performance of listed deposit money banks in Nigeria is at 1% level of significant as indicated with the p-value of 0.000. By implication, it means increase in market risk will dwindle financial performance of listed deposit money banks. This is because high interest rate increases the cost of loans and the type of interest rates adopted by banks influences the non-performing assets that may in turn affect the banks' financial performance. This provides a basis for rejecting null hypothesis that says, market risk has no significant effect on financial performance of listed deposit money banks in Nigeria. This finding is consistent with the proposition of financial distress theory and the findings of Ayodele *et al* (2014), Kassi *et al* (2019) and Muriithi *et al* (2016) who found that market risk has negative effect on financial performance of listed deposit money banks.

CONCLUSION AND RECOMMENDATIONS

The study investigated the effect of board independence and risk management on the financial performance of listed deposit money banks in Nigeria. Using the multiple regressions to analyze the data, this study concludes that there is a positive and significant relationship between board independent and financial performance of listed deposit money banks in Nigeria. The study also concludes that there is negative significant relationship between credit risk, market risk and financial performance of listed deposit money banks in Nigeria.

Hence, the study recommends that banks should possess considerable proportion of independence non-executive directors as to provide valuable services to boards by offering additional expertise and competencies, broadening their knowledge base for key decisions, contributing actively to the strategic decision-making process, and securing access to critical resources which in turn will improve performance.

It is therefore necessary for the bank to hire qualified personnel to analyze credit risk. They can gather information of clients in the entire bank, of changes in financial environment, of consumption trends and of consumer loans. The personnel can periodically analyze and adjust the weight of every risk factor and control the rate of overdue payment loan in the right moment. The bank should periodically organize entrepreneurship training for clients especially to self employers. This training will help to educate customers on how to use their loan so that the loan given will not be diverted from the purpose of which it was collected.

Finally, the study recommends that banks should mitigate the market risk by using appropriate risk management strategies through forwards, futures, swaps, options, and insurance as well as securitization techniques. Banks should establish financial risk early warning mechanism so that managers can take effective real time comprehensive management to reflect banks financial position including financial structure, profitability and asset utilization to enhance operational efficiency. They should also focus on hedging and forecasting the macroeconomic factors that determine interest rates rather than the focusing on interest rates themselves this will enable them to project profitable business.

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